AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently amended): A model mouse for human psychiatric disorders with deficient function of pituitary adenylate cyclase-activating polypeptide gene, having a homozygous chromosome of a somatic cell and a germ cell with deficiency of function of pituitary adenylate cyclase-activating polypeptide gene such that expression of a mature peptide coding sequence of the gene has disappeared and the animal exhibits abnormal psychomotor behavior.

2. (Previously presented): A model mouse according to claim 1, wherein said function is defective due to deficiency of a part or whole of exon 5 in said pituitary adenylate cyclase-activating polypeptide gene.

3. (Previously presented): A model mouse according to claim 1, wherein said function is defective due to introducing a point mutation or inserting another gene in exon 5.

4. (Previously presented): A model mouse according to claim 2, wherein a part or whole of exon 5 is deleted by substituting the part or whole of the exon 5 by another gene.

5. (Previously presented): A model mouse according to claim 4, wherein said another gene is a marker gene.

6. (Previously presented): A model mouse according to claim 5, wherein said marker gene is a neomycin resistance gene.

7-13. (Canceled)

14. (Previously presented): A model mouse according to claim 1, wherein the abnormal

psychomotor behavior is at least one selected from the group consisting of hyperactive locomotor behavior, increased exploratory-related behavior, and reduced anxiety-related behavior.

15. (Previously presented): A model mouse according to claim 14, wherein the hyperactive behavior is susceptible to attenuation by antipsychotic drug haloperidol.

16. (Previously presented): A model mouse according to claim 1, wherein the psychiatric disorder is selected from the group consisting of schizophrenia, emotional disturbance, bipolar affective, and hyperactivity disorder.

17. (Previously presented): A model mouse according to claim 1, wherein the psychiatric disorder is attention deficit hyperactivity disorder.

18. (Previously presented): A model mouse according to claim 1, which is useful for studying the in vivo function of PACAP-dependent signaling in pathological disorders.